**La Vista Junior High School**

[](http://plv.ishareinfo.org/lvjh)

2011 SAME / SMP Written Proposal

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| --- | --- | --- | --- | --- | --- |
| **Team Leader:**  Renae Kelly | | | | | |
| **Mentors:**  Benjamin Fennelly, EIT PBS & J Alex Flanigan, US Army Corps of Engineers  Ryan Horner, Leo A Daly | | | | | |
| [http://www.pki.nebraska.edu/studentinfo/simp/companies/pbs&j.jpg](http://www.pbsj.com/) **[US Army Corps of Engineers](http://www.usace.army.mil/)** **[Leo A. Daly](http://www.leoadaly.com/)**    Project Title: **New Face on 84th**  April 1, 2011 | | | | | |
| **Student Team Members/Grade Enrolled In:** | | | | |
|  | Collin Worley  Zach Zavitz  Avery Hardy  Adrian Wacker | 7 7 8 8 | Allen Cardenas  Trey Grubaugh  Jacobbie Mengel  Nick Strehle  Josh Wilson | 8 8 8 8  8 |

**Table of Contents**

Title Page……………………………………………………………………………………….....1

Table of Contents………………………………………………………………………………2

Project Problem Statement……………………………………………………………….3

Research Completed…………………………………………………………………………5

Recommendations (Project Solution) ………………………………………………7

Action Plan for Implementation of Recommendations………………………9

Team Organization…………………………………………………………………………12

Process Description (Journey Documentation)………………………………..13

Lessons Learned……………………………………………………………………………..14

Acknowledgements………………………………………………………………………..15

Bibliography…………………………………………………………………………………….15

**Project Problem Statement:** *Explain specifically what the problem that needs to be addressed is: (focus on the PROBLEM, not the solution)*

***We plan to create a solution for our school's traffic problem, due to student drop off and pick up congestion. Our project will find a new use for a vacant building located within the same block as our school, which used to be a WalMart. We want to transform that space into a kid friendly place to learn, play, and socialize.***  *(from our synopsis)*

Need or Demand (define issues / describe the **demand** for a solution) *Have one paragraph describe the traffic problem and the other paragraph describe the WalMart problem. What research did you do to determine this was definitely a problem needing a solution?*

1. Need for traffic relief. The traffic jams do get to Giles road. Parents can be late to work and in other cases the kids can be late to school because of the problem.

Need or Demand (define issues / describe the **demand** for a solution)

Key Environmental Issue or Concern *Primary research sources / comparisons with existing resources*

Clarity *Explain the problem clearly and thoroughly*

Real World Relevance

* *Who or what are the clients, users, or other elements impacted by the problem*

The kids of LVJH and their parents would be the ones to benefit from this the most. The kids can be late and the parents could be late to work. The roads could have snow or ice on them that stops or slows the already slow traffic to the Jr high and makes the kids late.

* *How are they affected?*
* *How does this relate to actual or current conditions?*

Complexity

* *Identifying, researching, and reporting the* ***various aspects*** *of the problem*

Witnessing the traffic problem every day before and after school. Have other people who don’t go to this school on a daily basis have also complained about the traffic problem. Researching the problem we did a traffic count and a question and answer survey**.** The results of our studies where summarized graphical methods and statistical analysis.

Originality

*Define and explain the problem issues in an original or unique way.*

Local situation that is cause by the location of the school because of the limited space to expand the parking lot.

1. Another problem is that there is an empty Wal-Mart that no one has plans for. We want to change this.

Our plan is we will turn the Wal-Mart into a water park. ~~Your questions will most likely be explained later on in the paper.~~ There have been requests for a place to hang at a water park type place.

Need or Demand (define issues / describe the **demand** for a solution)

Key Environmental Issue or Concern *Primary research sources / comparisons with existing resources*

Recycle a building and water used in the building. There will be no unnecessary destruction and unwanted waste. Plus the ground around the new planned park will not be disturbed or destroyed. As you can probably predict we are environmentally friendly.

Clarity *Explain the problem clearly and thoroughly*

Real World Relevance

* *Who or what are the clients, users, or other elements impacted by the problem*

with the survey we pulled from vision 84 a lot of people wanted a water park. This will grant their wishes. The clients will be the citizens of Papillion and La Vista, the people who will mostly want to go to this park are children and young adults 8 to 20 years of age mostly.

* *How are they affected?*

If they wanted a new water park then this will give them a park to go to and to spend parts of their year.

* *How does this relate to actual or current conditions?*

This would improve current conditions by taking an “eyesore” (from vision 84 survey) and turning it into a community and tourist attraction.

Complexity

*Identifying, researching, and reporting the various aspects of the problem*

Their is a problem with leaving a vacant building in the middle of a growing city, so instead of tearing it down to build this or something else we are going to use this building. We researched what people wanted and what the city would do, and with vision 84’s modernizing of the city in that area. They were planning to build something else but we could persuade them leave the building and use this idea if they would.

Originality

*Define and explain the problem issues in an original or unique way.*

**Research Completed:**

**1. Traffic Problem**

>Various alternatives for selection of project.

Other alternatives where considered expand traffic lanes on school property, expand parking lot around the school, construct parking lot at football fields.

>Needs of project.

Traffic count two different mornings.

**La Vista Junior High Traffic Survey**

This survey is being conducted so that the engineers at LVJH can figure out a way to make our traffic system more efficent for the students.

\* Required

Top of Form

How do you get to school *\**

* Walk
* Ride with a parent/gardian
* Carpool
* Other: 

If you Drive/carpool, where do you get dropped off at? *\**

* In front of the school
* On Edgewood (street that the school branches off of)
* Dropped off at another location
* The Church parking lot
* I don't drive to school
* Other: 

Where do you live? *\**

* East of 84th Street (by the new wal-mart)
* West of 84th Street (by No Frills and target)
* I don’t know

About what time do you come to school in the morning *\** 

When you arrive at school would you say that the traffic is moving very quickly or not moving at all? *\** (grade on a 1 to 10 scale. 1 being not moving at all and 10 being moving very quickly) 

If you could change anything about the traffic what would it be, please explain. *\** 





Bottom of Form

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>Info associated with a component of the project problem solution.

1. Vacant Walmart Building

* *Various alternatives for selection of project*
* *Needs of project users*
* *Information associated with a component of the project problem solution*

**Recommendations (Project Solution)**

1. Traffic **Recommendations and Action Plan for Project Solution**

**Clarity of Description:**

Explain the solution clearly and thoroughly. Address issues defined in the problem identification.

Use research, figures, examples, diagrams, tables, and other exhibits to show thoroughness of design process and support conclusions.

**Real World Feasibility:**  Identify how the recommendations or solutions will benefit the client, users or elements, including:

Economically

Socially

Environmentally

Politically

**Solution Value to Cost:** Provide an estimate of the project costs, and describe how the solution is worth the price of the project. (Lifecycle benefits of the solution compared to initial project costs)

Human Factors

Timing

Quality Resources Required

Safety

Workflow

1. **Vacant WalMart Building**

**Clarity of Description:**

Explain the solution clearly and thoroughly. Address issues defined in the problem identification.

Use research, figures, examples, diagrams, tables, and other exhibits to show thoroughness of design process and support conclusions.

**Real World Feasibility:**  Identify how the recommendations or solutions will benefit the client, users or elements, including:

Economically

Socially

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Politically

**Solution Value to Cost:** Provide an estimate of the project costs, and describe how the solution is worth the price of the project. (Lifecycle benefits of the solution compared to initial project costs)

Human Factors

Timing

Quality Resources Required

Safety

Workflow

**Action Plan for Implementation of Recommendations**

For the project to come to completion :

* Describe steps needed to implement the project :
* Costs?
* Who will pay for it? Where will funds come from?
* Possible Funding Sources?

What approvals may be needed/from who in order to further implement the project?

Other Pertinent Factors

Complexity

**Team Organization**

**Design Teams**

|  |  |  |  |
| --- | --- | --- | --- |
| **Team Member** | **Strengths** | **Design Team** | **Project Assignment** |
| Zach | Science, Engineering and Design | WalMart Renovation | Written Report  and  Sustainability/Research |
| Collin | Far Out Ideas | WalMart Renovation | Sustainability/Research |
| Josh | Experience  Math and Science | WalMart Renovation | Develop Sketch Up – WalMart Plan |
| Trey |  | WalMart Renovation | Develop Sketch Up – WalMart Plan |
| Adrian | Math and Science | WalMart Renovation | Analyze Data From Traffic Survey /  Written Report |
| Allen |  | Traffic Flow Problem | Analyze Data From Traffic Survey /  Written Report |
| Jacobbie | Experience  Math | Traffic Flow Problem | Develop Diagram or Model for Traffic Flow |
| Avery | Math & Science | Traffic Flow Problem | Develop Diagram or Model for Traffic Flow |
| Nik | Math, Building Stuff | Traffic Flow Problem | Written Report |

**Describe what each team member did and why.**

Strengths of team member?? Why were they put on that design team??

**How did your team work together (communication, scheduling, assignments)?**  
*(Fully integrated into the project and/or solution in ways that allow each team member to achieve their full potential in terms of their individual talents. Team displays obvious energy and team spirit and it is evident that all team members contributed to the project. Team participated in teamwork building activities and documented those activities in the written proposal or presentation.)*

**Process Description (Journey Documentation)**

What were the steps we went through? Review the notes from your meetings, so you can document your accomplishments. You can review the information from the submittal page pasted below.

Describe the process on project selection and why the preferred project was chosen. Report team activities, interviews, research, etc. used toward developing the problem and solution.

|  |  |  |
| --- | --- | --- |
| Introduce Program, Brainstorm Possible Projects | 2010-11-03 | yes |
| Discussed Possible Projects / Areas of Need, Reviewed Criteria for Evaluation of Project | 2010-11-10 | yes |
| Meet Mentor Ben Fennelly | 2010-11-17 | yes |
| Analyze and Evaluate Possible Project Ideas, Finalize Project Selection | 2010-11-17 | yes |
| Develop Project Synopsis to Submit | 2010-11-17 | yes |
| Identify Team Members' Strengths | 2010-12-01 | yes |
| Develop Project Scope, Description, and Timeline | 2010-12-01 | yes |
| Submittal # 1 Due 11-18-10 | 2010-11-17 | yes |
| Develop Research Plan | 2010-12-01 | no |
| Research Review / Research Plan Revised | 2010-12-09 | no |
| Continue Research | 2010-12-16 | no |
| Review Research Results / Develop Project Action Plan | 2011-01-06 | no |
| Submittal # 2 Due | 2011-01-06 | yes |
| Workshop at PKI 1110 S 67th Street | 2011-01-15 | yes |
| Continue Project Work | 2011-01-20 | yes |
| Model Work | 0000-00-00 | no |
| Written Report Work | 2011-02-17 | no |
| Project Documentation Work | 0000-00-00 | no |
| Cost Analysis Work | 0000-00-00 | no |
| Citing Sources and Bibliography Work | 2011-03-03 | no |
| Adjustments Made to Project Plan and Ideas | 0000-00-00 | no |
| Submittal # 3 Due | 2011-03-03 | yes |
| Finalize Report | 2011-03-24 | no |
| Finalize Drawings | 0000-00-00 | no |
| Written Proposal Due to PKI Room 391 by 5:00 PM | 2011-04-01 | no |
| Prepare Presentation | 2011-03-31 | no |
| Prepare Model | 2011-03-21 | no |
| Prepare Display Board | 2011-04-14 | no |
| Practice Presentation | 2011-04-26 | no |
| Project Display, Presentation and Awards Ceremony | 2011-04-28 |  |

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| --- | --- |
| Lost at Sea team activity 12-16-10 | |
| Develop/review research 1-6-11 | |
| Discuss options for Vacant WalMart Bldg. 1-12-11 | |
| Share possible solutions (drawings) for Vacant Walmart building 1-27-11? | |
| Met mentor Alex Flanigan 12-01-2010 | |
| Researched dimensions of water parks and the Papillion YMCA and compared with the size of the Wal-Mart vacant area 1-20-11 | |
| Brainstormed ideas to transform WalMart Building 1-27-11 | |
| Reviewed project criteria, assigned tasks to various team members | |
| Traffic Count Data Collected | |
|  |  | |
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**Lessons Learned** *Describe the principles learned or discovered in developing the project. What may have been done differently, given the team’s experience on the project. How does this apply to future projects you may be involved in? How might experience on this project affect team performance in other activities outside of this competition?*

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***Note of interest: for Merit Awards***

Special Considerations to add to the proposal where appropriate:

* **Applied Science:**  *(Goes well beyond the expectation in use, demonstration, and reporting of applied science methods. Completely integrated into the project solution, and reporting makes it clear the team made a conscious decision to do so)*
  1. Performing calculations in order to design a system or determine the effectiveness of a system.
  2. Evaluating material properties
  3. Applying information about human health or human perception to a design
  4. Applying experimental metods to develop a database or test a solution.
* **Innovation:** *(project and/or solution includes multiple concepts or technologies that have rarely been tried or proposed. Use of concepts or methods are fully explained and justified. Project or solution seems very feasible within the project constraints given the extremely new and innovative concepts. Project and/or solution has no inaccuracies or errors in claiming, describing, or reporting innovation. )*

1. A unique, imaginative, “outside the box” solution for the needs of their project
2. An improvement of an existing technological product or system
3. Use of “cutting edge” technologies or materials for their project
4. A unique way of using common technology or materials for their project
5. The development of a solution for a future need or project

* **Research** *(All sources are documented appropriately. Primary and secondary research is used throughout the project. Research is clearly described and applied to the solution. It includes several supporting details or examples.)*

1. Research into various alternatives for the selection of the project solution.
2. Research into the needs of project users through surveys, interviews, etc.
3. Research on information associated with a component of the project problem solution. (who owns the building, etc???)

* **Sustainability** (*Goes well beyond the expectation in use, demonstration, and reporting of unique sustainable strategies. Sustainable strategies are completely integrated into the project and solution, and reporting makes it clear the team made a conscious decision to do so.)*

1. Reusing land and materials for a new purpose.
2. Creating energy efficient designs.
3. Generating power from renewable resources such as wind, and solar energy.
4. Designing with a reduced amount of material and waste.
5. Conserving water.
6. Using renewable materials for a project.
7. Designing products that will produce fewer toxins during construction and operation.
8. Improving the quality of people’s environment.
9. Creating designs that will react to their users and their environment.

* **Technology** *(project and/or solution includes multiple technologies. Technology applications are project-appropriate, fully explained, and results –justified. Team understands the technology process. The project or solution as aided by technology seems very feasible within the project constraints.)*

1. Knowledge and application of tools, techniques, crafts, systems, or methods of organization.
2. Changes the natural environment to satisfy our wants and needs.
3. Technology can be evidenced in a project by appropriate application and/or use of existing known scientific, engineering, and/or architectural process-related technology to enable or enhance the project solution.

* **Teamwork** *(Fully integrated into the project and/or solution in ways that allow each team member to achieve their full potential in terms of their individual talents. Team displayes obvious energy and team spirit and it is evident that all team members contributed to the project. Team participated in teamwork building activities and documented those activities in the written proposal or presentation.)*

**Acknowledgements** (where did you get your information from?) Who else helped you with this project?

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| **Who did your team contact for help?** |

**Bibliography** list resources used in correct format

**Problem/Solution/Journey Evaluation**

**For a 4 (Outstanding) you need to:**

* Clearly define the problem and solution
* Work is well explained, accurate, and of highest quality in content and appearance
* Proposal and Presentation is well organized, demonstrates thorough knowledge of project elements, and provides detailed support.
* Presentation builds on the information provided in the proposal.
* Project approach is original.
* Team issues and resolutions are discussed.
* Team building activities used and incorporated into project results.
* Project could definitely be taken to higher development level.